

## PATENT ABSTRACTS OF JAPAN

(11) Publication number : 02-171088  
(43) Date of publication of application : 02.07.1990

---

(51) Int. Cl. H04N 5/335

H01L 27/146

---

(21) Application number : 63-326529 (71) Applicant : SONY CORP

(22) Date of filing : 24.12.1988 (72) Inventor : HAMAZAKI MASAHARU

---

### (54) SOLID-STATE IMAGE PICKUP ELEMENT

#### (57) Abstract:

PURPOSE: To attain elimination of a fixed pattern noise and various control by connecting two switches for column and row selection in series to a reset means in a solid-state image pickup element of an internal amplifier type so as to attain resetting for each picture element.

CONSTITUTION: A photo diode 11 is provided to each picture element, whose one terminal is connected to a gate of a MOS transistor(TR) 12 having an amplification function. The TR 12 connects in series to a vertical switching TR 13 with a ground level GND, whose gate is connected to a vertical gate line from a 1st vertical scanning circuit 14. Two MOS TRs 1, 2 connected in series are provided between the gate of the TR 12 and a reset voltage VR. Since resetting is implemented when the two TRs are simultaneously turned on, the resetting of each picture element is attained singly and resetting corresponding to various types of scanning is attained.

---

#### LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of

application other than the  
examiner's decision of rejection or  
application converted registration]

[Date of final disposal for  
application]

[Patent number]

[Date of registration]

[Number of appeal against  
examiner's decision of rejection]

[Date of requesting appeal against  
examiner's decision of rejection]

[Date of extinction of right]